



IAP12 Rec'd PCT/PTO 23 MAY 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Lee

Application No.: 10/564,895

Filed: 1/17/2006

Title: Improved 3D Velocity Modeling, with Calibration and Trend Fitting using Geostatistical Techniques, Particularly Advantageous for Curved-Ray Prestack T

Attorney Docket No.: 50243

Art Unit:

Examiner:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION MAILED 5/3/6
MISSING REQUIREMENTS UNDER 35 USC 371 (Copy Attached)

Dear Sir:

Applicant did miscalculate the number of independent claims in the submission under 35 USC 371, based on the published application. (Applicant notifies the Office that the published application misprinted some claims.) (Also, please note that the inventor/applicant is "Wook B. Lee.")

In the submission under Section 371, however, applicant did authorize the commissioner to charge any additional fees to deposit account 50-1753 (50243.) See page 2 of the Submission under 35 USC Section 371, copy attached. Applicant submits, therefore, that a "late fee" is inappropriate in this case. Nonetheless, a check for \$165.00 is attached to avoid any possible delay of the application. Please credit the deposit account, as requested, if you agree that a late fee is inappropriate.

Attached also find a copy of the transmittal letter to the United States Receiving Office including the "declaration of inventorship." The return postcard indicates receipt by the PCT on 5 August 2004, copy also attached.

05/30/2006 GFREY1 00000121 10564895

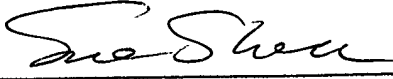
01 FC:2617
02 FC:2614

65.00 OP
100.00 OP

If the PTO is unable to locate the prior filed declaration, applicant will submit a new one upon your further indication that the identified prior submitted declaration has been misplaced.

Respectfully Submitted,

5/23/06
Date



Sue Z. Shaper
Attorney/Agent for Applicant(s)
Reg. No. 31663

Sue Z. Shaper
1800 West Loop South, Suite 1450
Houston, Texas 77027
Tel. 713 550 5710

05-24-06



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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www.uspto.gov

U.S. APPLICATION NUMBER NO. 10/564,895	FIRST NAMED APPLICANT Wook B. Lee Seislink	ATTY. DOCKET NO. 50243
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INTERNATIONAL APPLICATION NO. PCT/US04/23456

I.A. FILING DATE 07/22/2004	PRIORITY DATE 07/23/2003
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Sue Z. Shaper
1800 West Loop South, Suite 1450
Houston, TX 77027

CONFIRMATION NO. 3431

371 FORMALITIES LETTER



OC000000018666488

Date Mailed: 05/03/2006

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 01/17/2006
- Copy of the International Search Report filed on 01/17/2006
- Copy of IPE Report filed on 01/17/2006
- Preliminary Amendments filed on 01/17/2006
- Request for Immediate Examination filed on 01/17/2006
- U.S. Basic National Fees filed on 01/17/2006
- Priority Documents filed on 01/17/2006
- Specification filed on 01/17/2006
- Claims filed on 01/17/2006
- Abstracts filed on 01/17/2006
- Drawings filed on 01/17/2006

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Additional claim fees of \$100 as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$165 for a Small Entity:

- \$65 Surcharge.
- Total additional claim fee(s) for this application is \$ 100
 - \$100 for 3 independent claims over 3.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

PAULETTE R KIDWELL

Telephone: (703) 308-9140 EXT 216

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/564,895	PCT/US04/23456	50243



PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paper Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/564,895
	Filing Date	Jan 17, 2006
	First Named Inventor	Lee, Wook
	Art Unit	
	Examiner Name	
Total Number of Pages in This Submission	Attorney Docket Number	50243

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input checked="" type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Response to Missing Requirements mailed 5/3/06 Copy of prior submitted declaration
Remarks It is believed that no further request for extension of time or fees are due. Notwithstanding, the Commissioner is authorized to charge any additional fees incurred or credit any overage to Deposit Account No.50-1753 (50243). Please regard this as a further request for extension of time to the extent one is needed. (Customer Account Number 22929)		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	<i>Sue Shaper</i>		
Signature	<i>Sue Shaper</i>		
Printed name	Sue Z. Shaper		
Date	May 23, 2006	Reg. No.	31663

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage via Express Mail EV 671531330 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Signature	<i>Sue Shaper</i>		
Typed or printed name	Sue Z. Shaper	Date	May 23, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


In you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER 50243
U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		PRIORITY DATE CLAIMED 7/23/2003
INTERNATIONAL APPLICATION NO. PCT/US2004/023,456	INTERNATIONAL FILING DATE 7/22/04 7/22/04	
TITLE OF INVENTION Improved 3D Velocity Modeling, with Calibration and Trend Fitting using Geostatistical Techniques, Particularly Advantageous for Curved-Ray Prestack Time Migration and for such Migration Followed by Prestack Depth Migration		
APPLICANT(S) FOR DO/EO/US Wook B. Lee - Seislink Corporation,		
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input checked="" type="checkbox"/> The US has been elected (Article 31). 5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)). <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (on file in PCT application) 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <p>Items 11 to 20 below concern document(s) or information included:</p> <ol style="list-style-type: none"> 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. (to follow) 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4). 20. <input type="checkbox"/> Other items or information: 		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO. PCT/US2004/023,456		ATTORNEY'S DOCKET NUMBER 50194	
21. The following fees are submitted:					
<input checked="" type="checkbox"/> a) Basic national fee				\$300.00	
<input checked="" type="checkbox"/> b) Examination fee				\$500.00	
<input checked="" type="checkbox"/> c) Search fee				\$200.00	
TOTAL OF ABOVE CALCULATIONS =				\$1,000.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE	
13	-100 = 0	/50 = 0		x \$250.00	\$ 0.00
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).					\$ 0.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	35 - 20 =	15	X \$50.00	\$ 750.00	
Independent claims	5 - 3 =	2	X \$200.00	\$ 400.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+	\$360.00	\$ 0.00
TOTAL OF ABOVE CALCULATIONS =				\$2,150.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.					\$1,075.00
SUBTOTAL =				\$1,075.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).					+
TOTAL NATIONAL FEE =				\$1,075.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property					+
TOTAL FEES ENCLOSED =				\$1,075.00	
				Amount to be refunded:	\$
				Amount to be charged:	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ 1075.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. <u>50-1753</u> in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>50-1753 (50243)</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO:					
 SIGNATURE:					
Sue Z. Shaper NAME					
31663 REGISTRATION NUMBER					

TRANSMITTAL LETTER TO THE UNITED STATES RECEIVING OFFICE

Date	August 5, 2004
International Application No.	PCT/US 04/23456
Attorney Docket No.	50194

I. Certification under 37 CFR 1.10 (If applicable)

977589217	August 5, 2004
Express Mail mailing number	Date of Deposit

I hereby certify that the application/correspondence attached hereto is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

	Sue Z. Shaper
Signature of person mailing correspondence	Typed or printed name of person mailing correspondence

II. ☐ New International Application

TITLE	Improved Velocity Modeling with 3 D Sismic	Earliest priority date (Day/Month/Year)
		23 Jul 2003

SCREENING DISCLOSURE INFORMATION: In order to assist in screening the accompanying international application for purposes of determining whether a license for foreign transmittal should and could be granted and for other purposes, the following information is supplied: (Note: check as many boxes as apply):

A. ☐ The invention disclosed was not made in the United States.

B. ☐ There is no prior U.S. application relating to this invention.

C. ☐ The following prior U.S. application(s) contain subject matter which is related to the invention disclosed in the attached international application. (NOTE: priority to these applications may or may not be claimed on form PCT/RO/101 (Request) and this listing does not constitute a claim for priority.)

application no.		filed on	
application no.		filed on	

D. ☐ The present international application contains additional subject matter not found in the prior U.S. application(s) identified in paragraph C. above. The additional subject matter is found on pages and ☐ DOES NOT ALTER ☐ MIGHT BE CONSIDERED TO ALTER the general nature of the invention in a manner which would require the U.S. application to have been made available for inspection by the appropriate defense agencies under 35 U.S.C. 181 and 37 CFR 5.1. See 37 CFR 5.15.

III. ☐ A Response to an invitation from the RO/US. The following document(s) is(are) enclosed:

A. ☐ A Request for An Extension of Time to File a Response

B. ☐ A Power of Attorney (General or Regular)

C. ☐ Replacement pages:

pages		of the request (PCT/RO/101)	pages		of the figures
pages		of the description	pages		of the abstract
pages		of the claims			

D. ☐ Submission of Priority Documents

Priority document		Priority document	
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E. ☒ Fees as specified on attached Fee Calculation sheet form PCT/RO/101 annex - It is believed that no further fees are due. Notwithstanding, the Commissioner is authorized to charge any additional fees incurred or credit any overage to Deposit Account No. 50-1753 (50194).

IV. ☐ A Request for Rectification under PCT 91 ☐ A Petition ☐ A Sequence Listing Diskette

V. ☒ Other (please specify): Declaration Box VIII not included with original application.

The person signing this form is the:	<input type="checkbox"/> Applicant	Sue Z. Shaper
	<input checked="" type="checkbox"/> Attorney/Agent (Reg. No.) 31663	Typed name of signer
	<input type="checkbox"/> Common Representative	Cust. # 22,929 Signature

I hereby certify that this is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated below and is addressed to:

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

By: 

Typed Name: Sue Z. Shaper

Express Mail Label No.: EV 785080757 US

Date of Deposit: 1-16-06